

REMARKS

INTRODUCTION

In accordance with the foregoing, claims 1 and 6-10 have been amended. Claims 2-4 and 18 have been cancelled. Claims 1 and 5-10 are pending and under consideration.

CLAIM REJECTIONS

Claims 1-10 and 18 were rejected under 35 USC 103(a) as being unpatentable over Okamoto et al. (US 5,696,744) (hereinafter "Okamoto").

Okamoto discusses a disk reproducing apparatus having a disk diameter determining function. The background section of Okamoto discusses several methods of discriminating the diameter of the optical disk. A first method is a reflection type optical sensor such as a photocoupler is arranged at a position outside of the radius of a smaller optical disk when the optical disk is attached to the motor to discriminate the diameter based on the presence/absence of reflected light. A second method is the diameter is discriminated based on the length of the total recording time recorded on an innermost area of the optical disk called a table of contents (TOC). A third method is the optical disk is driven at a constant torque to discriminate the diameter by counting the activation time required for the number of rotations to reach a predetermined value. A fourth method is the diameter is discriminated by a combination of the second and third methods. Okamoto, 1:37-1:57.

Further in Okamoto, the reproducing head is moved to a position corresponding to the outermost portion of an 8 cm CD and when the light reflected by the CD is present at that position, a discrimination signal representing whether focus control is performed or not is output, so that the disk is determined to be a 12 cm CD when the discrimination signal is outputted and to be an 8 cm CD when no discrimination signal is output. Since the radius of the CD is discriminated by determining whether focus control is performed or not, no cost-increasing extra part is necessary to detect the radius. Okamoto, 3:55-3:67.

Claims 1-5

Amended Claim 1 recites: "...if the measured focus error is above a constant value, detecting the optical disc as a fashion disc type having a non-circular shape and limiting the

operational speed level of the optical disc drive.” Support for this amendment may be found in at least paragraph [0039] of the specification and in Figures 1B-1D of the present application.

In the “Response to Arguments” section of the Office Action, the Examiner noted that as previously written, “a fashion disc” was interpreted as an 8 cm disc. Claim 1 has been amended to clearly recite that a fashion disc has a non-circular shape.

In contrast to Okamoto, claim 1 recites a method of detecting an optical disc that includes the detection of a non-circular fashion disc, such as those shown in Figures 1B, 1C and 1D of the present application. The non-standard configuration of the fashion disc rotating at the same speed of that for a standard disc can cause very serious noise and a failure of a lead-in operation due to a focus drop or an adjustment failure. As such, the reproduction of the fashion disc may cause instability of a conventional optical disc reproducing apparatus. The detection method recited in claim 1 addresses this problem. Okamoto only discusses a method of determining if a disc is an eight or twelve cm disc and makes no further discrimination regarding fashion discs using a focus error signal as recited in claim 1.

Claims 2-4 have been cancelled. Claim 5 depends on claim 1 and is therefore believed to be allowable for the foregoing reasons.

Withdrawal of the foregoing rejection is requested.

Claim 6-10

Claim 6 recites: “...a disc detection unit detecting a size of an optical disc according to the weight detected via the weight detection unit, determining the size of the optical disc by detecting the amount of data recorded on the optical disc from a lead-in area of the optical disc when the disc drive is driven, if determined as a result of the comparison via the comparison unit that the amount of data recorded on the optical disc is below the reference value, moving a pickup to a periphery area and measuring a focus error, and if the measured focus error is above a constant value, detecting the optical disc as a fashion disc type having a non-circular shape.” Support for this amendment may be found in at least paragraph [0039] of the specification and in Figures 1B-1D of the present application.

In the “Response to Arguments” section of the Office Action, the Examiner noted that as previously written, “a fashion disc” was interpreted as an 8 cm disc. Claim 6 has been amended to clearly recite that a fashion disc has a non-circular shape.

In contrast to Okamoto, claim 6 recites a disc detection unit that can detect a non-circular fashion disc, such as those shown in Figures 1B, 1C and 1D of the present application. The non-standard configuration of the fashion disc rotating at the same speed of that for a standard disc can cause very serious noise and a failure of a lead-in operation due to a focus drop or an adjustment failure. As such, a disc detection unit that can detect a fashion disc having an irregular shape may prevent instability of a conventional optical disc reproducing apparatus.

Claims 7-10 depend on claim 6 and therefore believed to be allowable for the foregoing reasons.

Withdrawal of the foregoing rejection is requested.

Claim 18

Claim 18 has been cancelled.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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